In the Specification:

Please insert the following paragraphs after page 21, line 2 of the specification as originally filed (English translation) at the end of the Brief Description of the Drawings section.

--Figures 14-14g illustrate an embodiment of a method of the present invention.

Figure 15 illustrates an alternative embodiment of a method of the present invention.--

Please insert the following paragraphs after page 55, line 10 of the specification as originally filed (English translation).

--Figure 14 shows an embodiment of a method 200 of the invention. A first step 202 of the method 200 comprises transmitting a plurality of symbols each having at least one bit from a transmitter to at least one receiver using at least one channel and a predetermined transmission power, wherein the symbols are transmitted with a receiver-specific transmission energy which on the part of the receiver results in the reception of the symbol with a reception energy which corresponds to an upper limit value associated with the receiver or a lower value of an error recognition rate in comparison with the upper limit value, and wherein to achieve the receiver-specific transmission energy and at the same time a bit rate which is as high as possible in dependence on the currently prevailing transmission conditions between the transmitter and the receiver the symbol duration or the number per symbol of transmitted bits or the symbol duration and the number per symbol of transmitted bits are adapted.

A variety of alternative or additional steps 204 are also provided. In step 206, exclusively the symbol duration is adapted. In step 208, the method comprises selecting between three available adaptation options, namely adaptation of the symbol duration, adaptation of the number per symbol of transmitted bits and adaptation both of the symbol duration and also the number per symbol of transmitted bits. In step 210, the method involves in channel-specific fashion on time average the predetermined transmission power and/or the radiated electrical field strength and/or the radiated magnetic field strength and/or the spectral power density in the context of admissible

power radiation or a parameter correlated with one or more of said parameters assumes a limit value corresponding to the maximum possible transmission energy per unit of time in the context of admissible radiation. In step 212, the predetermined transmission power is at a maximum on time average in the context of the technical design of the transmitter. In step 214, the transmission power can be predetermined. In step 216, the method comprises ascertaining a currently prevailing value in respect of the reception energy with a given transmission energy. In step 218, an RSSI measurement (radio signal strength indicator) in respect of the received power is carried out on the part of the receiver and a signal dependent on the measurement result is transmitted to the transmitter. In step 220, the method comprises ascertaining a currently prevailing value in respect of the error recognition rate. In step 222, the error recognition rate is a bit error rate (BER), a block error rate (BLER) or a frame error rate (FER). In step 224, adaptation of the symbol duration is effected in dependence on the currently prevailing value of the error recognition rate at the receiver end or a currently prevailing magnitude at the receiver end of the noise power density. In step 226, the receiver communicates to the transmitter the currently prevailing error recognition rate or the currently prevailing magnitude of the noise power density. In step 228, the transmitter estimates the currently prevailing error recognition rate at the receiver end or the currently prevailing magnitude of the noise power density. In step 230, the symbol duration or the number of bits contained in a symbol or both is adjusted down dynamically in dependence on the currently prevailing transmission conditions between transmitter and receiver in an existing connection or an ongoing data traffic without the connection or the data traffic being interrupted. In step 232, the change in the symbol duration takes place continuously in respect of time, alternatively quasi-continuously, alternatively at predetermined time intervals. In step 234, the symbol duration is adapted in channel-specific fashion, that is to say individually on each channel used. In step 236, the symbol duration is restricted towards short symbol duration values in channel-specific fashion by the bandwidth of the channel. In step 238, the symbol duration is determined from a continuous value spectrum. In step 240, the symbol duration is determined from a discrete value spectrum, wherein the discrete value spectrum contains the integral multiples of a symbol duration which is the shortest possible in channel-specific relationship. In step 242, the symbol duration T_{symbol} is determined at the transmitter end in accordance with the formula:

$$T_{symbol} = \frac{E_{min} \cdot \left(r/r_0 \right)^{\alpha}}{P_{send}}$$

wherein E_{min} is the reception energy corresponding to the upper limit value associated with the receiver in respect of the error recognition rate, P_{send} is the maximum transmission power, r is the distance between transmitter and receiver, r_0 is a reference distance and α is a propagation coefficient. In step 244, the selection of the number per symbol of transmitted bits is effected in dependence on the currently prevailing value of the error recognition rate at the receiver end or on a currently prevailing magnitude at the receiver end at the noise power density. In step 246, the number per symbol of transmitted bits is adapted in channel-specific relationship. In step 248, adaptation of the number per symbol of transmitted bits is effected when a symbol duration which is shortest in channel-specific relationship is already used. In step 250, a type of symbol with the highest possible number of bits is selected for transmission, which at the receiver end does not cause the upper limit value of the error recognition rate to be exceeded. In step 252, the symbols are transmitted divided up to a respective sequence of chips. In step 254, the symbols are transmitted in such a way that the available channel bandwidth is fully used. In step 256, the symbols are transmitted spread in respect of frequency. In step 258, the symbols are transmitted in the form of a chirp signal. In step 260, the symbols are transmitted in the form of a CDMA sequence. In step 262, the symbols are transmitted in the frame of a FDMA method. In step 264, a TDMA method is used on at least one channel. In step 266, the transmitter is a mobile terminal of a user and prior to the transmission of the symbols to a base station receives from the base station information about a frequency band to be used for the transmission. In step 268, a base station operating as a receiver checks incoming signals from a mobile terminal operating as a transmitter with a plurality of modulation modes and uses a modulation mode recognized as correct for reception of the signals from the mobile terminal. In step 270, a base station operating as a receiver receives incoming signals by means of a plurality of receivers, wherein a modulation mode is associated with each receiver and a mobile terminal operating as a transmitter uses one of the modulation modes available at the transmitter end for transmission of symbols to the base station.

Figure 14a shows alternative or additional steps to step 220. In step 272, the error recognition rate is ascertained by determining the number of errors within a received data frame. In step 274, the error recognition rate is ascertained by averaging the number of errors in a plurality of data frames.

Figure 14b shows an alternative or additional step to step 274. In step 276, the error recognition rate is ascertained by means of the number of negative receipt signals from the receiver over a predetermined period of time.

Figure 14c shows an alternative or additional step to step 252. In step 278, the symbols are spread in respect of frequency by being modulated with a noise or pseudo-noise sequence, the noise or pseudo-noise sequence being known to the receiver.

Figure 14d shows an alternative or additional step to step 278. In step 280, the noise or pseudo-noise sequence is dynamically adapted to the selected symbol duration.

Figure 14e shows an alternative or additional step to step 258. In step 282, chirp signals from the transmitter, which are intended for a respective receiver, are superimposed in respect of time.

Figure 14f shows an alternative or additional step to step 282. In step 284, the total of the transmission powers, radiated in a moment in time, of the mutually superimposed chirp signals is equal to the maximum admissible transmission power on the respective channel.

Figure 14g shows an alternative or additional step to step 262. In step 286, division into FDMA channels is effected dynamically in such a way that a lower bandwidth is allocated to receivers with good channel transmission conditions.

Figure 15 shows another embodiment of a method of the invention involving organization of a network. A first step 300 of the method comprises transmitting a plurality of symbols each with at least one bit from a transmitter to at least one receiver using at least one channel and a predetermined transmission power, wherein the symbols are transmitted with a receiver-specific transmission energy which on the part of the receiver leads to the reception of the symbol with a reception energy which

corresponds to an upper limit value associated with the receiver or a lower value of an error recognition rate, wherein in dependence on the currently prevailing transmission conditions between the transmitter and each individual receiver to achieve the receiver-specific transmission energy and at the same time a bit rate which is as high as possible the symbol duration, or the number per symbol of transmitted bits, or the symbol duration and the number per symbol of transmitted bits are adapted.--